

Transmitted Via US Mail and Electronic Mail

October 2₃, 2016

Mr. Jeffrey Thein
New Jersey Department of Environmental Protection
Division of Water Quality Bureau of Point Source Permitting – Region One
P.O. Box 029
Trenton, New Jersey 08625-0029

Re: Discharge Monitoring Report for October 2016

Diamond Alkali Superfund Site

Newark, New Jersey

Dear Mr. Thein:

In accordance with the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Surface Water (DSW) Permit Equivalent, dated May 2, 2000, for the Diamond Alkali Superfund Site (the site) in Newark, New Jersey, Tierra Solutions, Inc. (Tierra, formerly Chemical Land Holdings, Inc.) has prepared the Discharge Monitoring Report (DMR) for the month of September 2016 (Attachment 1). Tierra is currently treating groundwater and directly discharging treated effluent water to the Passaic River. The effluent water is sampled and analyzed once per month in accordance with the NJPDES DSW Permit Equivalent.

Beginning April 1, 2014, Tierra began directly discharging the treated groundwater to the Passaic River, moving away from the previous model of batch storage and testing prior to discharge. At the beginning of the month, the effluent is sampled and analyzed for the chemical constituents listed in the NJPDES DSW Permit Equivalent. The analytical results for each sample are validated to confirm that the constituent concentrations are within the limitations established in the NJPDES DSW Permit Equivalent. The analytical results are representative of the effluent treated and discharged throughout the month.

Eleven direct discharge events resulted in the discharge of 57,956 gallons of treated groundwater to the Passaic River during the month of September 2016. The direct discharge of treated effluent water is limited to periods of high tide when the adjacent mud flats were not exposed. A flow meter was used to record the volume of treated effluent discharged to the river.

A summary of the analytical results for the September 2016 treated effluent discharged, as well as the monthly average and daily maximum concentration for each chemical constituent (please note that the recorded information for pH does not include a monthly average; however, the daily maximum and minimum pH values were recorded) is included in Attachment 2.

If you should have any questions related to the DMR, please call me at (732) 579-7586.

Sincerely,

Brian Mikucki

Bi Shiph.

On behalf of Occidental Chemical Corporation (as successor to Diamond Shamrock Chemicals Company)

Enclosures

Cc: Ms. Elizabeth Butler

New Jersey Superfund Branch – 2
Emergency and Remedial Response Division
U.S. Environmental Protection Agency, Region II
290 Broadway, 20th Floor
New York, New York 10007-1866

Mr. Jay Nickerson Bureau of Case Management, Site Remediation Program Mail Code 401-05F P.O. Box 420 Trenton, New Jersey 08625-0420

Mr. Juan Somoano Glenn Springs Holdings, Inc. 5 Greenway Plaza, Suite 110 Houston, TX 77046

Attachment 1

Form Approved OMB No. 2040-0004

NAME Herra Solutions, Inc. (forme	AME	Tierra Solutions, Inc. (formerl
-----------------------------------	-----	--------------------------	---------

Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10th Floor

FACILITY

East Brunswick, NJ 08816 Diamond Alkali Superfund Site

LOCATION Newark, Essex County, NJ

DISCHARGE MONITORING REPORT (DMR) NJPDES DSW Permit Equivalent –

May 2000 PERMIT NUMBER

FROM

---DISCHARGE NUMBER

MONITORING PERIOD										
YEAR MO	DAY		YEAR MO	DAY						
2016 09	01	то	2016 09	30						

☐ Check here if no Discharge.

Note: Read Instructions before

completing this form.

		QUAN	TITY OR LOADING	3	C	UALITY OR CONC	ENTRATION		NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
Flow	SAMPLE	57,956	6,457	GPD					0	1/30	Flow Meter
1100	PERMIT REQUIREMENT	NL ¹	NL	Grb					0	1/30	Flow Meter
Total Cuspended Solida	SAMPLE				N/A	10 U	10 U		0	1/30	Grab
Total Suspended Solids	PERMIT REQUIREMENT				N/A	30	50	mg/l	0	1/30	Grab
Total Ormania Carban	SAMPLE				N/A	1.0 U	1.0 U		0	1/30	Grab
Total Organic Carbon	PERMIT REQUIREMENT				N/A	NL	40	mg/l	0	1/30	Grab
Detucles we third a code on a	SAMPLE	***			N/A	5.0 U	5.0 U		0	1/30	Grab
Petroleum Hydrocarbons	PERMIT REQUIREMENT				N/A	10	15	mg/l	0	1/30	Grab
211	SAMPLE				7.15	NA	7.85	SU	0	1/30	Grab
рН	PERMIT REQUIREMENT				6	NL	9	30	0	1/30	Grab
2.4.6 Triablerenhand	SAMPLE				N/A	5.0 U	5.0 U	/1	0	1/30	Grab
2,4,6-Trichlorophenol	PERMIT REQUIREMENT				N/A	115	260	– μg/l	0	1/30	Grab
2-Chlorophenol	SAMPLE				N/A	5.0 U	5.0 U	//	0	1/30	Grab
2-Cinorophenor	PERMIT REQUIREMENT				N/A	35	125	– μg/l	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE			ent and all attachments were p signed to assure that qualified			- Think .		TELEPHON	E	DAT	E
Brian Mikucki Project Coordinator	and evaluate the in system, or those po to the best of my k	formation submitted. Based ersons directly responsible f nowledge and belief, true, a	I on my inquiry of the person for gathering the information, accurate, and complete. I am	or persons who may the information su aware that there are	anage the bmitted is,	TURE OF PRINCIPAL EXE	CUTIVE `	2) 579-75	86 201	6 10 20	
TYPED OR PRINTED	significant penaltic for knowing violat		mation, including the possibi	nty of tine and imp	risonment OFF	ICER OR AUTHORIZED AC	ARE ARE	EA NUM	1BER	YEAR MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) Ibs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

PAGE 1 OF 7

NAME Tierra Solutions, Inc. (formerly

Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10th Floor

East Brunswick, NJ 08816

FACILITY Diamond Alkali Superfund Site LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER ---DISCHARGE NUMBER

Form Approved OMB No. 2040-0004

		M	ONITORING PERIO	D		
	YEAR MO	DAY		YEAR M	0	DAY
FROM	2016 09	01	то	2016 0	9	30

☐ Check here if no Discharge.

Note: Read Instructions before completing this form.

		QUAN [*]	TITY OR LOADING	3	C	UALITY OR CONC	ENTRATION		NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
2,4-Dichlorophenol	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
z,4-bicinorophenor	PERMIT REQUIREMENT	The Carlo			N/A	23	150	μg/l	0	1/30	Grab
Phenol	SAMPLE				N/A	23 U	23 U	/1	0	1/30	Grab
Phenoi	PERMIT REQUIREMENT	-			N/A	23	40	μg/l	0	1/30	Grab
1,2,4-Trichlorobenzene	SAMPLE				N/A	5.0 U	5.0 U	/!	0	1/30	Grab
1,2,4-111Cillorobetizette	PERMIT REQUIREMENT				N/A	45	90	- μg/l	0	1/30	Grab
Heyeshlershenzens	SAMPLE	5.1E-04	5.9E-04	lbs/d	N/A	22 U	22 U	/!	0	1/30	Grab
Hexachlorobenzene	PERMIT REQUIREMENT	NL	16.3	ay	N/A	22	40	- μg/l	0	1/30	Grab
1,2-Dichlorobenzene	SAMPLE				N/A	5.0 U	5.0 U	/!	0	1/30	Grab
1,2-Dictiloroperizerie	PERMIT REQUIREMENT				N/A	40	110	μg/l	0	1/30	Grab
1,3-Dichlorobenzene	SAMPLE				N/A	5.0 U	5.0 U	/!	0	1/30	Grab
1,3-Dictilorobenzene	PERMIT REQUIREMENT				N/A	25	35	μg/l	0	1/30	Grab
1,4-Dichlorobenzene	SAMPLE				N/A	5.0 U	5.0 U		0	1/30	Grab
1,4-Dictiloropenzene	PERMIT REQUIREMENT				N/A	18	45	- μg/l	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE	R I certify under per		nt a nd all attachments were			9.//.		TELEPHON	E	DAT	E
Brian Mikucki	and evaluate the ir	rformation submitted. Based	on my inquiry of the person or gathering the information,	or persons who m	anage the	- Imp	(73	2) 579-75	86 201	6 10 20	
Project Coordinator TYPED OR PRINTED	to the best of my l	mowledge and belief, true, a es for submitting false infort	ccur ate, and complete. I nation, including the possibil	am aware that the	re are SIGNA	TURE OF PRINCIPAL EXE ICER OR AUTHORIZED AC	CUTIVE `	<u> </u>	MBER	YEAR MO) DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

PAGE 2 OF 7

Form Approved OMB No. 2040-0004

NAME	Tierra	Solutions,	Inc.	(formerly
		,		(

Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10th Floor

FACILITY

East Brunswick, NJ 08816 Diamond Alkali Superfund Site

LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER

FROM

----DISCHARGE NUMBER

MONITORING PERIOD										
YEAR MO	DAY		YEAR M)	DAY					
		то								
2016 09	01		2016 09)	30					

☐ Check here if no Discharge.

Note: Read Instructions before completing this form.

		QUAN	TITY OR LOADING	i	C	UALITY OR CONC	ENTRATION		NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
Fluoranthene	SAMPLE				N/A	10 U	10 U	/1	0	1/30	Grab
riuotattutette	PERMIT REQUIREMENT				N/A	NL	16	- μg/l	0	1/30	Grab
Nonhthalana	SAMPLE				N/A	5.0 U	5.0 U	/1	0	1/30	Grab
Naphthalene	PERMIT REQUIREMENT				N/A	35	105	- μg/l	0	1/30	Grab
Phenanthrene	SAMPLE				N/A	5.0 U	5.0 U	ua/l	0	1/30	Grab
Filenanunene	PERMIT REQUIREMENT				N/A	35	105	- μg/l	0	1/30	Grab
Benzene	SAMPLE				N/A	5.0 U	5.0 U	ug/l	0	1/30	Grab
Denzene	PERMIT REQUIREMENT				N/A	21	57	- μg/l	0	1/30	Grab
Chlorobenzene	SAMPLE				N/A	5.0 U	5.0 U	ug/l	0	1/30	Grab
Chlorobenzene	PERMIT REQUIREMENT				N/A	23	45	- μg/l	0	1/30	Grab
1,2-Dichloroethane	SAMPLE				N/A	5.0 U	5.0 U	ua/l	0	1/30	Grab
1,2-Dictionectiane	PERMIT REQUIREMENT				N/A	30	85	- μg/l	0	1/30	Grab
1,1,1-Trichloroethane	SAMPLE				N/A	5.0 U	5.0 U	ua/l	0	1/30	Grab
1,1,1-THOMOTOCHIANC	PERMIT REQUIREMENT		-		N/A	, 25	65	- μg/i	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE			nt a nd all attachments were p signed to assure that qualifie			9:1/		TELEPHON	E	DATE	
Brian Mikucki Project Coordinator	and evaluate the is system, or those p	nformation submitted. Based ersons directly responsible fo	on my inquiry of the person or gathering the information, occur ate, and complete. I	or persons who m the information su	nanage the abmitted is,	- jwy-	(73	2) 579-75	86 201	6 10 20	
TYPED OR PRINTED		es for submitting false inform	nation, including the possibil			TURE OF PRINCIPAL EXE ICER OR AUTHORIZED AC		A NUN	MBER	YEAR MO	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

PAGE 3 OF 7

Form Approved OMB No. 2040-0004

NAME	Tierra	Solutions,	Inc.	(formerly
------	--------	------------	------	-----------

Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10th Floor

FACILITY

East Brunswick, NJ 08816 Diamond Alkali Superfund Site

LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER

---DISCHARGE NUMBER

			М	ONITORING PERIO	D		
	YEAR M	0	DAY		YEAR M	0	DAY
FROM	2016 0	9	01	то	2016 0)	30
	2016 0	9	01		2016 0)	

☐ Check here if no Discharge.

Note: Read Instructions before completing this form.

		QUAN	TITY OR LOADING	}	a	UALITY OR CONC	ENTRATION		NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
1,1-Dichloroethane	SAMPLE				N/A	5.0 U	5.0 U	ua/l	0	1/30	Grab
1, 1-Dictilordentiane	PERMIT REQUIREMENT				N/A	25	65	μg/l	0	1/30	Grab
Chloroform	SAMPLE				N/A	5.0 U	5.0 U	ua/l	0	1/30	Grab
Chlorotorm	PERMIT REQUIREMENT				N/A	20	40	μg/l	0	1/30	Grab
Trans-1,2-Dichloroethene	SAMPLE				N/A	5.0 U	5.0 U	ua/l	0	1/30	Grab
Trans-1,2-Dictiloroethene	PERMIT REQUIREMENT				N/A	25	65	μg/l	0	1/30	Grab
Ethyl Donzono	SAMPLE				N/A	5.0 U	5.0 U	/!	0	1/30	Grab
Ethyl Benzene	PERMIT REQUIREMENT				N/A		430	μg/l	0	1/30	Grab
Toluene	SAMPLE				N/A	5.0 U	5.0 U	/!	0	1/30	Grab
Toluene	PERMIT REQUIREMENT				N/A	18	35	μg/l	0	1/30	Grab
Trichloroethene	SAMPLE				N/A	5.0 U	5.0 U	a/l	0	1/30	Grab
ricino oeulene	PERMIT REQUIREMENT				N/A	25	65	μg/l	0	1/30	Grab
Vinyl Chloride	SAMPLE				N/A	5.0 U	5.0 U	/!	0	1/30	Grab
Viriyi Cilionide	PERMIT REQUIREMENT		1		N/A	25	65	μg/l	0	1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE			nt a nd all attachments were paigned to assure that qualifie			d . / /		TELEPHON	E	DAT	E
Brian Mikucki	and evaluate the is	formation submitted. Based	on my inquiry of the person or gathering the information,	or persons who m	anage the	- Thubala.	(73	2) 579-75	86 201	6 10 20	
Project Coordinator	to the best of my l	mowledge and belief, true, a	ccur ate, and complete. I nation, including the possibil	am aware that the	re are SIGNA	TURE OF PRINCIPAL EXE	CUTIVE `	<u> </u>			
TYPED OR PRINTED	for knowing viola		. 5 7			.oz on Ao monized A	ARE	A NUM	MBER	YEAR MC	DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

PAGE 4 OF 7

NAME Tierra Solutions, Inc. (formerly

Chemical Land Holdings, Inc.)
Two Tower Center Boulevard

10th Floor

East Brunswick, NJ 08816

FACILITY Diamond Alkali Superfund Site LOCATION Newark, Essex County, NJ

LOCATIO FROM

ADDRESS

NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER ---DISCHARGE NUMBER

Form Approved OMB No. 2040-0004

MONITORING PERIOD									
YEAR MO	DAY		YEAR M	0	DAY				
2016 09	01	то	2016 0	9	30				

☐ Check here if no Discharge.

Note: Read Instructions before completing this form.

		QUAN [*]	TITY OR LOADING	;	Q	UALITY OR CONC	ENTRATION	N		FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNI TS	NO. EX	OF ANALYSIS	TYPE
4,4-DDT	SAMPLE	7.9E-06	9.2E-06	lbs/d	N/A	0.34 UJL	0.34 UJL	ua/I	0	1/30	Grab
	PERMIT REQUIREMENT	NL	0.25	ay	N/A	NL	0.34	μg/l	0	1/30	Grab
4,4-DDE	SAMPLE				N/A	0.35 U	0.35 U	ua/I	0	1/30	Grab
4,4-DDL	PERMIT REQUIREMENT				N/A	NL	14	μg/l	0	1/30	Grab
Alpha-endosulfan	SAMPLE				N/A	0.050 U 0.0	50 U	μg/l	0	1/30	Grab
	PERMIT REQUIREMENT	2-1-2			N/A	32	90	μg/i	0	1/30	Grab
2,4-D	SAMPLE				N/A	12 UJ	12 UJ	ua/I	0	1/30	Grab
	PERMIT REQUIREMENT				N/A	1,500	3,300	μg/l	0	1/30	Grab
2,4-DB	SAMPLE				N/A	17 U	17 U	ua/I	0	1/30	Grab
2,4-00	PERMIT REQUIREMENT				N/A	17	25	μg/l	0	1/30	Grab
Dinoseb (DNBP)	SAMPLE				N/A	1.7 UJ	1.7 UJ	μg/I	0	1/30	Grab
Dinoses (BNSI)	PERMIT REQUIREMENT	-777			N/A	420	790	μg/i	0	1/30	Grab
Diovin (2.3.7.8-TCDD)	SAMPLE	1.9E-09	2.2E-09	lbs/d	N/A 0.00	00081 U 0.000	081 U	ua/I	0	1/30	Grab
Dioxin (2,3,7,8-TCDD)	PERMIT REQUIREMENT	NL	0.00006	ay	N/A NL 0.0000		0.000081	μg/I 0		1/30	Grab
NAME/TITLE PRINCIPAL EXECUTIVE OFFICE	R I certify under pen		nt a nd all attachments were			$d \cdot / /$	Т	ELEPHON	E	DATE	Ξ
Brian Mikucki Project Coordinator	Project Coordinator system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are signature of principal executive						579-75	86 201	6 10 20		
TYPED OR PRINTED significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. OFFICER OR AUTHORIZED AGENT AREA N							NUM	MBER	YEAR MO	DAY	

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) Ibs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

PAGE 5 OF 7

NAME Tierra Solutions, Inc. (formerly

Chemical Land Holdings, Inc.)

ADDRESS Two Tower Center Boulevard

10th Floor

East Brunswick, NJ 08816

FACILITY Diamond Alkali Superfund Site LOCATION Newark, Essex County, NJ

FROM

NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER

DISCHARGE NUMBER

Form Approved OMB No. 2040-0004

YEAR MO	DAY		YEAR M	0	DAY	Check
2016 09	01	то	2016 0	9	30	Note: I comple

Check here if no Discharge.

Note: Read Instructions before completing this form.

		QUAN'	TITY OR LOADING	•	C	UALITY OR CONC	ENTRATIO	N		NO. FREQUENCY		SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIN	MUM	UNI TS	EX	OF ANALYSIS	TYPE
Total Recoverable Antimony	SAMPLE				N/A	60 U	60	U	μg/l	0	1/30	Grab
Total Necoverable Antimony	PERMIT REQUIREMENT				N/A	200	30	5	рул	0	1/30	Grab
Total Recoverable Arsenic	SAMPLE				N/A	10 U	10	U	μg/l	0	1/30	Grab
Total Necoverable Arsenic	PERMIT REQUIREMENT				N/A	50	11	5	рул	0	1/30	Grab
Total Recoverable Beryllium	SAMPLE				N/A	8.6 U	8.6	U	μg/l	0	1/30	Grab
	PERMIT REQUIREMENT				N/A	NL	8.6	5	μg/i	0	1/30	Grab
Total Recoverable Cadmium	SAMPLE				N/A	31 U	31	U	a/I	0	1/30	Grab
Total Necoverable Caumium	PERMIT REQUIREMENT		_		N/A	NL	31	-	µg/l	0	1/30	Grab
Hexavalent Chromium	SAMPLE				N/A	66 U	66	U	a/I	0	1/30	Grab
riexavalent omomun	PERMIT REQUIREMENT				N/A	NL	66	5	µg/l	0	1/30	Grab
Trivalent Chromium	SAMPLE				N/A	44 U	44	U		0	1/30	Grab
Trivalent Chromium	PERMIT REQUIREMENT				N/A	NL	44	ļ	µg/l	0	1/30	Grab
Total Recoverable Copper	SAMPLE				N/A	62 U	62	U	ua/I	0	1/30	Grab
Total Necoverable copper	PERMIT REQUIREMENT	т		N/A	, NL	62		μg/l	0	1/30	Grab	
		ify under penalty of law that this document a nd all attachments were prepared under my dire pervision in accordance with a system designed to assure that qualified personnel properly grant to assure the properly grant to assure the qualified personnel properly grant to a qualified personnel properly grant to assure the qualified personnel properly grant to assure the qualified personnel properly grant to a qualified personnel properly grant to a qualified personnel							TELEPHONE		DATI	
Brian Mikucki and		nformation submitted. Based	on my inquiry of the person or gathering the information,	or persons who m	anage the	- Ihuhala.		(732)	70_759	36 201	6 10 20	
Project Coordinator	to the best of my k	nowledge and belief, true, a	ccur ate, and complete. I nation, including the possibil	am aware that the	re are SIGNA	TURE OF PRINCIPAL EXEC		(132)	9-750	30 20 11	0 10 20	
TYPED OR PRINTED	for knowing violat		nacion, including the possibil	ny or this and imp	imprisonment OFFICER OR AUTHORIZED AGENT AREA NUMBER YEAR MO						DAY	

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) Ibs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

PAGE 6 OF 7

NAME Tierra Solutions, Inc. (formerly

Chemical Land Holdings, Inc.)
Two Tower Center Boulevard

ADDRESS Two Tower Co

10th Floor

East Brunswick, NJ 08816

FACILITY Diamond Alkali Superfund Site LOCATION Newark, Essex County, NJ

NJPDES DSW Permit Equivalent – May 2000 PERMIT NUMBER DISCHARGE NUMBER

Form Approved OMB No. 2040-0004

	MONITORING PERIOD										
	YEAR MO)	DAY		YEAR M	0	DAY				
FROM	2016 09		01	то	2016 0	9	30				

☐ Check here if no Discharge.

Note: Read Instructions before completing this form.

		QUAN	TITY OR LOADING	3	C	UALITY OR CONC	ENTRATION		NO.	FREQUENCY	SAMPLE
PARAMETER		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX	OF ANALYSIS	TYPE
Total Recoverable Lead	SAMPLE				N/A	18 U	18 U	ua/l	0	1/30	Grab
Total Necoverable Lead	PERMIT REQUIREMENT		20 MARSON		N/A	NL	18	μg/l	0	1/30	Grab
Total Recoverable Mercury	SAMPLE				N/A	3.4 U	3.4 U	ug/l	0	1/30	Grab
Total Necoverable Mercury	PERMIT REQUIREMENT				N/A	NL	3.4	μg/l	0	1/30	Grab
Total Recoverable Nickel	SAMPLE				N/A	73 U	73 U	/1	0	1/30	Grab
	PERMIT REQUIREMENT				N/A	NL	73	μg/l	0	1/30	Grab
Total Recoverable Silver	SAMPLE				N/A	69 U	69 U	μg/l	0	1/30	Grab
	PERMIT REQUIREMENT				N/A	NL	69	μул	0	1/30	Grab
Total Recoverable Zinc	SAMPLE				N/A	47 U	47 U	μg/l	0	1/30	Grab
Total Necoverable Zinc	PERMIT REQUIREMENT				N/A	NL	47	μул	0	1/30	Grab
Total Cyanide	SAMPLE				N/A	78 U	78 U	μg/l	0	1/30	Grab
rotal Oyamuc	PERMIT REQUIREMENT				N/A	NL	78	рул	0	1/30	Grab
	SAMPLE				N/A						
	PERMIT REQUIREMENT				N/A						
			nt a nd all attachments were paigned to assure that qualifie			9 · / /		TELEPHON	E	DAT	E
Brian Mikucki	and evaluate the is	nformation submitted. Based	on my inquiry of the person or gathering the information,	or persons who m	anage the	- Inuhala.	(73:	2) 579-75	86 201	6 10 20	
Project Coordinator			ccur ate, and complete. I nation, including the possibil			TURE OF PRINCIPAL EXE	CUTIVE	<u> </u>			511/
TYPED OR PRINTED	for knowing viola	tions.	<u> </u>		AREA NUMBER YEAR MO DAY						

COMMENT AND EXPLANATION OF ANY VIOLATIONS (*Reference all attachments here*) 1) The flow quantity is actually the total flow discharged for the entire month. 2) NL – Not Limited. 3) N/A – Not Applicable. 4) U – Constituent Analyzed, but Not Detected. 5) GPD – Gallons per Day. 6) lbs/day – pounds/day. 7) R – the data are unusable (compound may or may not be present). 8) J – Detection limit is estimated.

EPA Form 3220-1 (Rev. 03-99) Previous editions may be used.

PAGE 7 OF 7

ATTACHMENT 2

SEPTEMBER 2016 SUPPLEMENTAL TABLE FOR MONTHLY DISCHARGE MONITORING REPORT DIAMOND ALKALI SUPERFUND SITE NEWARK, NEW JERSEY

			Sample ID:	W-TSI- ∐T -090116	W-TSI-ETT-DUP-090116	TB-090116-701R
	Permit	Limitation				
Constituent			Sample Date:	9/1/2016	9/1/2016	9/1/2016
	Monthly	Daily	SDGNumber:	LISTER701R	LISTER701R	LISTER701R
	Avg.	Max	Units			
Total Suspended Solids(TSS)	30	50	mg/I	10 U	10 U	
Total Organic Carbon (TOC)		40	mg/I	1.0 U	1.0 U	-
Petroleum Hydrocarbons	10	15	mg/I	5.0 U	5.0 U	-
pН		6 - 9	SU	7.70	7.70	-
2,4,6-Trichlorophenol	115	260	µg/I	5.0 U	5.0 U	=
2-Chlorophenol	35	125	µg/I	5.0 U	5.0 U	_
2,4-Dichlorophenol	23	150	μg/I	5.0 U	5.0 U	-
Phenol	23	40	μg/I	23 U	23 U	-
1,2,4-Trichlorobenzene	45	90	μg/I	5.0 U	5.0 U	5.0 U
Hexachlorobenzene	22	40	μg/I	22 U	22 U	_
1,2-Dichlorobenzene	40	110	μg/I	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	25	35	μg/I	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	18	45	μg/I	5.0 U	5.0 U	5.0 U
Fluoranthene		16	μg/I	10 U	10 U	_
Naphthalene	35	105	μg/I	5.0 U	5.0 U	_
Phenanthrene	35	105	μg/I	5.0 U	5.0 U	-
Benzene	21	57	μg/I	5.0 U	5.0 U	5.0 U
Chlorobenzene	23	45	μg/I	5.0 U	5.0 U	5.0 U
1,2-Dichloroethane	30	85	μg/I	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	25	65	μg/I	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	25	65	μg/I	5.0 U	5.0 U	5.0 U
Chloroform	20	40	μg/I	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (Total)	25	65	μg/I	5.0 U	5.0 U	_
trans-1,2-Dichloroethene	25	65	μg/I	5.0 U	5.0 U	5.0 U
Ethylbenzene		430	μg/I	5.0 U	5.0 U	5.0 U
Toluene	18	35	μg/I	5.0 U	5.0 U	5.0 U
Trichloroethene	25	65	μg/I	5.0 U	5.0 U	5.0 U
Vinyl Chloride	25	65	μg/I	5.0 U	5.0 U	5.0 U
4,4-DOT		0.34	μg/I	0.34 WL	0.34 WL	_
4,4-DDE		14	μg/I	0.35 U	0.35 U	_
Endosulfan I	32	90	μg/I	0.05 U	0.05 U	_
2,4-D	1,500	3,300	μg/I	12 W	12 W	_
2,4-DB	17	25	μg/I	17 U	17 U	_
Dinoseb (DNBP)	420	790	μg/I	1.7 W	1.7 W	_
Dioxin (2,3,7,8-TCDD)		0.000081	μg/I	0.000081 U	0.000081 U	_
Total Recoverable Antimony	200	305	μg/I	60 U	60 U	_
Total Recoverable Arsenic	50	115	μg/I	10 U	10 U	_
Total Recoverable Beryllium		8.6	μg/I	8.6 U	8.6 U	_
Total Recoverable Cadmium		31	μg/I	31 U	31 U	_
Hexavalent Chromium		66	μg/I	66 U	66 U	_
Trivalent Chromium		44	μg/I	44 U	44 U	_
Total Recoverable Copper		62	μg/l	62 U	62 U	_
Total Recoverable Lead		18	μg/I	18 U	18 U	_
Total Recoverable Mercury		3.4	μg/I	3.4 U	3.4 U	_
Total Recoverable Nickel		73	μg/I	73 U	73 U	_
Total Recoverable Silver		69	μg/I	69 U	69 U	_
Total Recoverable Zinc		47	μg/I	47 U	47 U	_
Total Cyanide		78	μg/I	78 U	78 U	_
Note:	GTOS SCONOTOS SCONOTOS SCONOTOS SCONOTOS SCONOTOS SCONOTOS			A CONTROL OF THE SECOND CONTROL OF THE SECON		De NOTA A CONTROL A SEGUNDA DE CANTROL A CONTROL A

Notes:

mg/I-Milligrams/liter

µg/I - Micrograms/liter SU - Standard units

⁻⁻⁻ Not analyzed or not applicable

U-Constituent was not detected above the associated detection limit

W-The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

UL -The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity, low bias is indicated

SEPTEMBER 2016 MONTHLY DISCHARGE ANALYTICAL DATA SUMMARY DIAMOND ALKALI SUPERFUND SITE

	Poweit	imitation	SDGNumber:	W-TSI-EFF-090116	Monthly	Daily
Constituent			SCHAILE.			
	Monthly Avg.	Daily Max		LISTER701R	Average ⁽¹⁾	Maximum
Flow	_		GPD		57,956	6,457
Total Suspended Solids(TSS)	30	50	mg/l	10 U	10 U	10 U
Total Organic Carbon (TCC)	_	40	mg/I	1.0 U	1.0 U	1.0 U
Petroleum Hydrocarbons	10	15	mg/l	5.0 U	5.0 U	5.0 U
Field pHRange (September, 2016)	_	6 - 9	SU	7.15 - 7.85	NA	7.85
2,4,6-Trichlorophenol	115	260	μg/I	5 U	5.0 U	5 U
2-Chlorophenol	35	125	μg/I	5 U	5.0 U	5 U
2,4-Dichlorophenol	23	150	μg/I	5 U	5.0 U	5 U
Phenol	23	40	μg/I	23 U	23 U	23 U
1,2,4-Trichlorobenzene	45	90	µg/I	5.0 ∪	5.0 U	5.0 U
Hexachlorobenzene	22	40	µg/l	22 U	22 U	22 U
Hexachlorobenzene	_	16.3	lbs/d	NA	5.1E-04	5.9E-04
1,2-Dichlorobenzene	40	110	µg/I	5.0 U	5.0 U	5.0 U
1,3-Dichlorobenzene	25	35	μg/I	5.0 U	5.0 U	5.0 U
1,4-Dichlorobenzene	18	45		5.0 U	5.0 U	5.0 U
,	10		μg/I			
Fluoranthene	_	16	μg/I	10 U	10.0 U	10 U
Naphthalene	35	105	μg/I	5.0 U	5.0 U	5.0 U
Phenanthrene	35	105	μg/I	5.0 U	5.0 U	5.0 U
Benzene	21	57	μg/I	5.0 ∪	5.0 U	5.0 U
Chlorobenzene	23	45	μg/I	5.0 ∪	5.0 U	5.0 U
1,2-Dichloroethane	30	85	μg/I	5.0 U	5.0 U	5.0 U
1,1,1-Trichloroethane	25	65	μg/I	5.0 U	5.0 U	5.0 U
1,1-Dichloroethane	25	65	μg/I	5.0 U	5.0 U	5.0 U
Chloroform	20	40	μg/I	5.0 U	5.0 U	5.0 U
1,2-Dichloroethene (Total)	25	65	μg/I	5.0 U	5.0 U	5.0 U
trans-1,2-Dichloroethene	25	65	μg/I	5.0 U	5.0 U	5.0 U
Ethylbenzene	_	430	μg/I	5.0 U	5.0 U	5.0 U
Toluene	18	35	μg/I	5.0 U	5.0 U	5.0 U
Trichloroethene	25	65	μg/I	5.0 U	5.0 U	5.0 U
Vinyl Chloride	25	65	µg/I	5.0 U	5.0 U	5.0 U
4,4-DDT	_	0.34	μg/l	0.34 WL	0.34 WL	0.34 WL
4,4-DDT	_	0.25	lbs/d	NA	7.9E-06	9.2E-06
4,4-DDE	_	14	µg/I	0.35 U	0.35 U	0.35 U
Endosulfan I	32	90	μg/I	0.05 U	0.050 U	0.05 U
2,4-D	1,500			12 W	12.0 W	12 W
		3,300	μg/I			
2,4-DB	17	25	μg/I	17 U	17.0 U	17 U
Dinoseb (DNBP)	420	790	μg/I	1.7 W	1.7 W	1.7 W
Dioxin (2,3,7,8-TODD)	_	0.000081	μg/I	0.000081 U	0.000081 U	0.000081 U
Dioxin	_	0.00006	lbs/d	NA	1.9E-09	2.2E-09
Total Recoverable Antimony	200	305	μg/I	60 U	60 U	60 U
Total Recoverable Arsenic	50	115	μg/I	10 U	10 U	10 U
Total Recoverable Beryllium	-	8.6	μg/I	8.6 U	8.6 U	8.6 U
Total Recoverable Cadmium	-	31	μg/I	31 U	31 U	31 U
Hexavalent Chromium	-	66	μg/I	66 U	66 U	66 U
Trivalent Chromium	_	44	μg/I	44 U	44 U	44 U
Total Recoverable Copper	_	62	μg/I	62 U	62 U	62 U
Total Recoverable Lead	_	18	μg/I	18 U	18 U	18 U
Total Recoverable Mercury	_	3.4	μg/I	3.4 U	3.4 U	3.4 U
Total Recoverable Nickel	_	73	μg/I	73 U	73 U	73 U
Total Recoverable Silver	_	69	µg/I	69 U	69 U	69 U
Total Recoverable Zinc	_	47	µg/I	47 U	47 U	47 U
Total Cyanide	_	78	μg/I	78 U	78 U	78 U
основания при предергать при предергать предергать предергать по предергать п	anno e minamo e minamo e minamo e vinamo e vinam					

Notes:

GPD - Gallons per day mg/I - Milligrams/liter

μg/I - Micrograms/liter SU - Standard units

⁻⁻⁻ Not analyzed or not applicable

U - Constituent was not detected above the associated detection limit

W - The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

ULL -The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity, low bias is indicated

⁽¹⁾ A Monthly Average Flow value is not calculated, value presented is the actual total flow (in gallons) for the month. Monthly averages are based on 1/2 the detection limit, where applicable.

The mass loadings for hexachlorobenzene, 4,4-DDT, and 2,3,7,8-TCDD (dioxin) were calculated based on 1/2 of the detection limit.